

In the Claims:

1 1. (Canceled)

1 2. (Currently Amended) The probe needle according to claim 6 ~~wherein the elongated~~
2 ~~member includes a fixed end and a free end and wherein the contact member is~~ comprises a first
3 surface attached at to the free end of the substantially liner elongated member.

1 3. (Previously Presented) The probe needle according to claim 6 wherein the entire surface
2 of the contact tip is provided with the coating.

1 4. (Original) The probe needle according to claim 3 wherein the entire surface of the probe
2 needle is provided with the coating.

1 5. (Canceled)

1 6. (Currently Amended) A probe needle for testing semiconductor chips, the probe needle
2 comprising:

3 an a substantially linear elongated member including a fixed end that is fastened in a
4 holding element;

5 a contact tip attached at ~~one~~ a free end of the substantially linear elongated member,
6 wherein at least a portion of the surface of the contact tip is provided with a coating of a
7 chemically inert, electrically conductive material that is hard relative to the material of surfaces
8 of the semiconductor chips to be contacted, the coating comprising titanium nitride; and
9 an adhesive layer of titanium arranged beneath the titanium nitride layer so that the
10 adhesive layer is between the surface of the contact tip and the titanium nitride layer.

1 7. (Canceled)

1 8. (Currently Amended) The method according to ~~claim 10~~ claim 11 wherein the coating
2 the probe needle at least in the area of the contact tip comprises completely coating the probe
3 needle.

1 9. (Canceled)

1 10. (Canceled)

1 11. (Currently Amended) ~~The method according to claim 10~~ A method for manufacturing a
2 probe needle for testing semiconductor chips, the method comprising:
3 providing a probe needle that includes a contact tip;
4 coating the probe needle at least in the area of the contact tip with a chemically inert,
5 electrically conductive material that is hard relative to the material of the contact surfaces of the
6 semiconductor chips to be contacted, wherein the coating comprise coating with titanium nitride;
7 and
8 coating at least in the area of the contact tip with a titanium layer prior to the coating with
9 titanium nitride, wherein the coating with titanium and titanium nitride takes place in situ.

1 12. (Currently Amended) The method according to ~~claim 10~~ claim 11 wherein the probe
2 needle is coated with titanium using a physical vapor deposition (PVD) method.

1 13. (Original) The method according to claim 12 wherein the PVD method comprises a
2 reactive magnetron sputtering method.

1 14. (Original) The method according to claim 12 wherein the coating takes place from a
2 titanium target with the addition of the reactive gases, argon and nitrogen.

1 15. (Currently Amended) The method according to ~~claim 10~~ claim 11 wherein the titanium
2 nitride comprises titanium nitride with a stoichiometric ratio of Ti:N = 1.

1 16-17. (Canceled)

1 18. (Currently Amended) A method of forming a semiconductor device, the method
2 comprising:

3 fabricating a semiconductor wafer to include a number of circuits and a number of pads;

4 contacting a test probe to at least one of the pads, the test probe being attached to a probe
5 card, the test probe including a substantially linear elongated member with a contact tip fastened

6 to, the elongated member extending away from the probe card, the contact tip being that is coated
7 with a chemically inert, electrically conductive material that is hard relative to the at least one

8 pad, wherein the test probe includes a contact tip that is coated with a layer of titanium and a

9 layer of titanium nitride overlying the layer of titanium; and

10 performing an electrical test by applying a test signal to the semiconductor wafer through
11 the test probe.

1 19. (Previously Presented) The method of claim 18 and further comprising, after performing
2 an electrical test, packaging the semiconductor device.

1 20. (Previously Presented) The method of claim 18 wherein the step of contacting a test
2 probe is performed on an individual semiconductor chip.

1 21. (New) The probe needle according to claim 6 wherein the holding element comprises a
2 probe card.

1 22. (New) The probe needle according to claim 2 wherein the contact tip includes a body
2 extending away from the elongated member, the body narrowing being widest at the surface and
3 narrowing as it extends away from the elongated member.

1 23. (New) The probe needle of claim 22 wherein the body of the contact tip narrows to a
2 point.

1 24. (New) The method of claim 18 wherein the elongated member includes a fixed end that
2 is fastened to the probe card and a free end, the contact member being attached to the free end of
3 the probe card.

1 25. (New) The method of claim 24 wherein the contact tip includes a body extending away
2 from the elongated member, the body narrowing being widest at a surface that is attached to the
3 elongated member and narrowing as it extends away from the elongated member.

1 26. (New) The method of claim 25 wherein the body of the contact tip narrows to a point.